

IN THE CLAIMS:

Please cancel Claims 5-15.

Please amend claims 17-19 as follows.

Please add new claims 39-65 as follows.

1. (Original) A semiconductor device comprising:

a plurality of switching elements;

a plurality of pixel electrodes;

an opposing electrode; and

a frame rate conversion portion, wherein:

a display signal is input to the plurality of pixel electrodes through the plurality of switching elements;

all of the display signals input to the plurality of pixel electrodes have the same polarity within each frame period, with the electric potential of the opposing electrode as a reference;

the frame rate conversion portion operates in synchronous with the display signals; and

among the two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference.

2. (Original) A semiconductor device comprising:

a plurality of switching elements;

a plurality of pixel electrodes;

an opposing electrode; a plurality of source signal lines; and a frame rate conversion portion, wherein:

a display signal input to the plurality of source signal lines is then input to the plurality of pixel electrodes through the plurality of switching elements;

within each frame period: display signals having mutually inverse polarities, with the electric potential of the opposing electrode as a reference, are input to source signal lines which are adjacent to the plurality of source signal lines; and the display signals input to each of the plurality of source signal line always have the same polarity, with the electric potential of the opposing electrode as a reference;

the frame rate conversion portion operates in synchronous with the display signals; and

among two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference.

3. (Original) A semiconductor device comprising:

a plurality of switching elements;

a plurality of pixel electrodes;

an opposing electrode;

a plurality of source signal lines; and

a frame rate conversion portion, wherein:

a display signal input to the plurality of source signal lines is then input to the plurality of pixel electrodes through the plurality of switching elements;

within each frame period: the display signals input to all of the plurality of source signal lines always have the same polarity, with the electric potential of the opposing electrode as a reference;

the polarities of the display signals input to the plurality of source signal lines are mutually inverted in adjacent line periods, with the electric potential of the opposing electrode as a reference;

the frame rate conversion portion operates in synchronous with the display signals; and

among two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference.

4. (Original) A semiconductor device comprising:

a plurality of switching elements;

a plurality of pixel electrodes;

an opposing electrode; a plurality of source signal lines; and

a frame rate conversion portion, wherein:

a display signal input to the plurality of source signal lines is input to the plurality of pixel electrodes through the plurality of switching elements;

within each frame period: display signals having mutually inverse polarities, with the electric potential of the opposing electrode as a reference, are input to source signal lines adjacent to the plurality of source signal lines;

the polarities of the display signals input to the plurality of source signal lines are mutually inverted in adjacent line periods, with the electric potential of the opposing electrode as a reference;

the frame rate conversion portion operates in synchronous with the display signals; and

among two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference.

5-15. (Canceled)

16. (Previously Presented) A semiconductor display device according to claim 1, wherein the switching element is: a transistor formed using single crystal silicon; a thin film transistor formed using polycrystalline silicon; or a thin film transistor formed using amorphous silicon.

17. (Currently Amended) A computer using the semiconductor display device according to ~~any one of claims~~ claim 1 to 16 and 25 to 38.

18. (Currently Amended) A video camera using the semiconductor display device according to ~~any one of claims~~ claim 1 to 16 and 25 to 38.

19. (Currently Amended) A DVD player using the semiconductor display device according to ~~any one of claims~~ claim 1 to 16 and 25 to 38.

20. (Original) A method of driving a semiconductor display device, comprising:

a plurality of switching elements;

a plurality of pixel electrodes;

an opposing electrode; and

a frame rate conversion portion, wherein:

display signals are input to the plurality of pixel electrodes through the plurality of switching elements;

the frame rate conversion portion operates in synchronous with the display signals; and

among two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference.

21. (Original) A method of driving a semiconductor display device, comprising:

- a plurality of switching elements;
- a plurality of pixel electrodes;
- an opposing electrode; and
- a frame rate conversion portion, wherein:
 - display signals are input to the plurality of pixel electrodes through the plurality of switching elements;

- all display signals input to the plurality of pixel electrodes have the same polarity within each frame period, with the electric potential of the opposing electrode as a reference;

- the frame rate conversion portion operates in synchronous with the display signals; and

- among two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference.

22. (Original) A method of driving a semiconductor display device, comprising:

- a plurality of switching elements;
- a plurality of pixel electrodes;
- an opposing electrode;
- a plurality of source signal lines; and

a frame rate conversion portion, wherein:

display signals input to the plurality of source signal lines are then input to the plurality of pixel electrodes through the plurality of switching elements;

within each frame period: display signals having mutually inverse polarities, with the electric potential of the opposing electrode as a reference, are input to source signal lines adjacent to the plurality of source signal lines; and the display signals input to the plurality of source signal lines always have the same polarity, with the electric potential of the opposing electrode as a reference;

the frame rate conversion portion operates in synchronous with the display signals; and

among two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference.

23. (Original) A method of driving a semiconductor display device, comprising:

a plurality of switching elements;

a plurality of pixel electrodes;

an opposing electrode;

a plurality of source signal lines; and

a frame rate conversion portion, wherein:

display signals input to the plurality of source signal lines are then input to the plurality of pixel electrodes through the plurality of switching elements;

within each line period, the display signals input to all of the plurality of source signal lines always have the same polarity, with the electric potential of the opposing electrode as a reference;

the polarities of the display signals input to the plurality of source signal lines are mutually inverted in adjacent line periods, with the electric potential of the opposing electrode as a reference;

the frame rate conversion portion operates in synchronous with the display signals; and
among two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference.

24. (Original) A method of driving a semiconductor display device, comprising:

a plurality of switching elements;

a plurality of pixel electrodes;

an opposing electrode;

a plurality of source signal lines; and

a frame rate conversion portion wherein:

display signals input to the plurality of source signal lines are then input to the plurality of pixel electrodes through the plurality of switching elements;

display signals having mutually inverse polarities, with the electric potential of the opposing electrode as a reference, are input to source signal lines adjacent to the plurality of source signal lines within each frame period;

the polarities of the display signals input to the plurality of source signal lines are mutually inverted in adjacent line periods, with the electric potential of the opposing electrode as a reference;

the frame rate conversion portion operates in synchronous with the display signals; and

among two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference.

25. (Previously Presented) A semiconductor display device according to claim 2, wherein the switching element is: a transistor formed using single crystal silicon; a thin film transistor formed using polycrystalline silicon; or a thin film transistor formed using amorphous silicon.

26. (Previously Presented) A semiconductor display device according to claim 3, wherein the switching element is: a transistor formed using single crystal silicon; a thin film transistor formed using polycrystalline silicon; or a thin film transistor formed using amorphous silicon.

27. (Previously Presented) A semiconductor display device according to claim 4, wherein the switching element is: a transistor formed using single crystal silicon; a thin film transistor formed using polycrystalline silicon; or a thin film transistor formed using amorphous silicon.

28-38. (Canceled)

39. (New) A computer using the semiconductor display device according to claim 1.

40. (New) A computer using the semiconductor display device according to claim 2.

41. (New) A computer using the semiconductor display device according to claim 3.

42. (New) A computer using the semiconductor display device according to claim 4.

43. (New) A computer using the semiconductor display device according to claim 20.

- 44. (New) A computer using the semiconductor display device according to claim 21.
- 45. (New) A computer using the semiconductor display device according to claim 22.
- 46. (New) A computer using the semiconductor display device according to claim 23.
- 47. (New) A computer using the semiconductor display device according to claim 24.
- 48. (New) A video camera using the semiconductor display device according to claim 1.
- 49. (New) A video camera using the semiconductor display device according to claim 2.
- 50. (New) A video camera using the semiconductor display device according to claim 3.
- 51. (New) A video camera using the semiconductor display device according to claim 4.
- 52. (New) A video camera using the semiconductor display device according to claim 20.
- 53. (New) A video camera using the semiconductor display device according to claim 21.
- 54. (New) A video camera using the semiconductor display device according to claim 22.
- 55. (New) A video camera using the semiconductor display device according to claim 23.
- 56. (New) A video camera using the semiconductor display device according to claim 24.
- 57. (New) A DVD player using the semiconductor display device according to claim 1.
- 58. (New) A DVD player using the semiconductor display device according to claim 2.
- 59. (New) A DVD player using the semiconductor display device according to claim 3.
- 60. (New) A DVD player using the semiconductor display device according to claim 4.
- 61. (New) A DVD player using the semiconductor display device according to claim 20.
- 62. (New) A DVD player using the semiconductor display device according to claim 21.
- 63. (New) A DVD player using the semiconductor display device according to claim 22.
- 64. (New) A DVD player using the semiconductor display device according to claim 23.
- 65. (New) A DVD player using the semiconductor display device according to claim 24.